

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/1/2008, with respect to the rejection(s) of claim(s) 1-2, 4, 6, 8-13, 15-20, and 22-23 under the prior art combination of Masters in view of Becker have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made with respect to dependent claims 12, 19, and 23 under 35 USC 101.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. As per claims 12, 19, and 23, the claimed invention is directed to non-statutory subject matter. Claims 12, 19, and 23 recite a computer-readable medium having computer executable instructions. The Examiner notes that the instant specification provides non-statutory examples of computer readable media at Page 10 line 18 through Page 11 line 13 (e.g., computer readable media may be communication media which include data structures, modulated data signals, carrier waves, or any information delivery media). Accordingly, claims 12, 19, and 23 encompass non-statutory subject matter *per se* in view of the instant specification.

Allowable Subject Matter

4. Claims 1-2,4,6,8-11,13,15-18,20, and 22 are allowed.

Examiner's Reasons for Allowance

5. The following is an Examiner's statement of reasons for allowance: In interpreting the claims, in light of the specification and the amendments dated 2/1/2008, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.

6. The prior art of record fails to teach either alone or in combination the limitation of: *transmitting a first parked HTTP-based "request" from the first processor to be parked at the second processor for establishing a persistent communication channel between the first processor and the second processor through the proxy server to allow the transfer of second messages from the second processor to the first processor, and the delivery of second message delivery acknowledgments from the first processor to the second processor, and wherein the first parked HTTP-based "request" includes therein a request that the second processor transmit a reply after the expiration of a time period even if there are no messages to send to the first processor so that the first processor can assess a status of the connection thereto*, as set forth in independent claim 1.

7. **Becker et al. (6,557,038)** teach the use of the HTTP protocol for maintaining a persistent HTTP connection between a client and a server. Becker teaches a client/server persistent HTTP connection in which a periodic keep-alive triggers the sending of keep-alive messages from a client to a server in order to maintain session state at the server for the persistent HTTP connection. However, Becker fails to explicitly disclose the use of a first parked HTTP-based request which includes therein a request that the second processor transmit a reply after the expiration of a time period *even if there are no messages to send to the first processor so that the first processor can assess a status of the connection thereto*, as claimed in independent claim 1.

(Becker, Abstract, Col 5 line 49 through Col 6 line 16)

8. **Masters (6,374,300)** teaches the utilization of a proxy server for HTTP data transmission between a server and client. However, Masters fails to explicitly teach wherein the first HTTP-based "request" includes therein a request that the second processor transmits a reply after the expiration of a time period even if there are no messages to send to the first processor so that the first processor can assess a status of the connection thereto, transmitting a second parked HTTP-based request via the proxy server to the second processor, the second parked HTTP-based request including an acknowledgment to the first HTTP-based reply in order to maintain the persistent HTTP connection between the first processor and the second processor through the proxy server, and wherein the second parked HTTP-based request includes therein a request that the second processor transmits a reply after the expiration of a

time period even if there are no messages to send to the first processor in order to ensure persistent connectivity between the first and second processors, as claimed in independent claim 1. (**Masters, Abstract, Fig. 8, Col. 7 lines 38-50**)

9. **HTTP 1.1 (Hypertext Transfer Protocol – HTTP/1.1)** teaches the creation of persistent HTTP connections between clients and servers. However, the KEEP ALIVE feature of HTTP 1.1 merely provides a time remaining for response before the connection is closed. Accordingly, the client request including a request for a persistent HTTP connection and an associated Keep Alive value fails to include the use of a first parked HTTP-based request which includes therein a request that the second processor transmit a reply after the expiration of a time period *even if there are no messages to send to the first processor so that the first processor can assess a status of the connection thereto*, as claimed in independent claim 1. (**HTTP 1.1, Sections 8.1.2 – 8.1.4**)

10. Claims 2,4,6,8-11 are allowed based upon their dependency upon allowable independent claim 1 and the addition of further limitations.

11. The prior art of record fails to teach either alone or in combination the limitation of: ***selecting by a client a connection time out period used in order to determine a time duration in which the client is to receive a reply message from a server in order to ensure persistent connectivity between the client and the server, and***

allowing the client to include the connection time out period in a parked HTTP-based request sent from the client to be parked at the server for requesting a HTTP-based reply from the server after the expiration of the connection time out period even if there are no messages to send to the client in order to avoid connection termination by the proxy server to open a persistent connection therewith, as set forth in independent claim 13.

12. **Becker et al. (6,557,038)** teach the use of the HTTP protocol for maintaining a persistent HTTP connection between a client and a server. Becker teaches a client/server persistent HTTP connection in which a periodic keep-alive triggers the sending of keep-alive messages from a client to a server in order to maintain session state at the server for the persistent HTTP connection. However, Becker fails to explicitly disclose a client including the connection time out period in a parked HTTP-based request sent from the client to be parked at the server for requesting a HTTP-based reply from the server after the expiration of the connection time out period *even if there are no messages to send to the client in order to avoid connection termination by the proxy server to open a persistent connection therewith*, as claimed in independent claim 13. **(Becker, Abstract, Col 5 line 49 through Col 6 line 16)**

13. **Masters (6,374,300)** teaches the utilization of a proxy server for HTTP data transmission between a server and client. However, Masters fails to explicitly teach selecting by a client a connection time out period used in order to determine a time

duration in which the client is to receive a reply message from a server in order to ensure persistent connectivity between the client and the server, and allowing the client to include the connection time out period in a parked HTTP-based request sent from the client to be parked at the server for requesting a HTTP-based reply from the server after the expiration of the connection time out period even if there are no messages to send to the client in order to avoid connection termination by the proxy server to open a persistent connection therewith, as claimed in independent claim 13. (**Masters**,

Abstract, Fig. 8, Col. 7 lines 38-50)

14. HTTP 1.1 (Hypertext Transfer Protocol – HTTP/1.1) teaches the creation of persistent HTTP connections between clients and servers. However, the KEEP ALIVE feature of HTTP 1.1 merely provides a time remaining for response before the connection is closed. Accordingly, the client request including a request for a persistent HTTP connection and an associated Keep Alive value fails to include the use of a first parked HTTP-based request which includes therein a request that the server transmit a reply after the expiration of a time period *even if there are no messages to send to the first processor so that the first processor can assess a status of the connection thereto*, as claimed in independent claim 13. (**HTTP 1.1, Sections 8.1.2 – 8.1.4**)

15. Claims 15-18 are allowed based upon their dependency upon allowable independent claim 13 and the addition of further limitations.

16. The prior art of record fails to teach either alone or in combination the limitation of: *receiving an HTTP-based request originating from the client through the proxy server wherein the HTTP-based request includes a first connection time out period used in order to determine a time duration in which the client is to receive a reply message in order to ensure persistent connectivity between the client and the server, parking the HTTP-based request without responding thereto unless a message is generated that needs to be transmitted to the client or unless the first connection time out period expires, the parking of the HTTP-based request establishing a persistent connection from the client through the proxy server and when the message is generated or the first connection time out period expires, generating an HTTP-based reply to the HTTP-based request parked for the client, the HTTP-based reply containing the message therein*, as set forth in independent claim 20.

17. **Becker et al. (6,557,038)** teach the use of the HTTP protocol for maintaining a persistent HTTP connection between a client and a server. Becker teaches a client/server persistent HTTP connection in which a periodic keep-alive triggers the sending of keep-alive messages from a client to a server in order to maintain session state at the server for the persistent HTTP connection. However, Becker fails to explicitly disclose parking the HTTP-based request without responding thereto unless a message is generated that needs to be transmitted to the client or unless the first connection time out period expires, the parking of the HTTP-based request establishing

a persistent connection from the client through the proxy server and when the message is generated or the first connection time out period expires, generating an HTTP-based reply to the HTTP-based request parked for the client, the HTTP-based reply containing the message therein, as claimed in independent claim 20. **(Becker, Abstract, Col 5 line 49 through Col 6 line 16, C)**

18. **Masters (6,374,300)** teaches the utilization of a proxy server for HTTP data transmission between a server and client. However, Masters fails to explicitly teach a first connection time out period used in order to determine a time duration in which the client is to receive a reply message in order to ensure persistent connectivity between the client and the server, parking the HTTP-based request without responding thereto unless a message is generated that needs to be transmitted to the client or unless the first connection time out period expires, the parking of the HTTP-based request establishing a persistent connection from the client through the proxy server and when the message is generated or the first connection time out period expires, generating an HTTP-based reply to the HTTP-based request parked for the client, the HTTP-based reply containing the message therein, as claimed in independent claim 20. **(Masters, Abstract, Fig. 8, Col. 7 lines 38-50)**

19. **HTTP 1.1 (Hypertext Transfer Protocol – HTTP/1.1)** teaches the creation of persistent HTTP connections between clients and servers. However, the KEEP ALIVE feature of HTTP 1.1 merely provides a time remaining for response before the

connection is closed. Accordingly, the client request including a request for a persistent HTTP connection and an associated Keep Alive value fails to include the use of a first parked HTTP-based request which includes therein a request to transmit a reply after the expiration of a time period *even if there are no messages to send to the first processor* so that the first processor can assess a status of the connection thereto, as claimed in independent claim 1. (**HTTP 1.1, Sections 8.1.2 – 8.1.4**)

20. Claim 22 is allowed based upon its dependency upon allowable independent claim 20 and the addition of further limitations.

21. Claims 12, 19, and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

22. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT FORD whose telephone number is (571)272-8630. The examiner can normally be reached on 8-5:30 Mon-Thurs alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. F./

Examiner, Art Unit 2141

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2141